VEHICLE ROLLOVER DETECTION USING DUAL-AXIS ACCELERATION SENSING

Abstract of the Disclosure

A rollover sensing apparatus and method are provided for generating a safing (arming) signal for use in vehicle rollover detection. The rollover sensing apparatus includes a first acceleration sensor located on a vehicle and oriented an angle offset from the longitudinal axis and lateral axis of the vehicle, and sensing longitudinal and lateral components of acceleration of the vehicle. The apparatus includes a second acceleration sensor located on the vehicle and oriented at an angle offset from the longitudinal axis and lateral axis of the vehicle, and sensing longitudinal and lateral components of acceleration of the vehicle. The apparatus further includes control logic for determining a safing signal as a function of at least one of the acceleration signals. The safing signal may be used to detect a vehicle rollover and deploy restraint devices.